



July 1, 2022

The Honorable Rusty Crowe, Chair
Senate Health and Welfare Committee
425 5th Avenue North
Suite 720, Cordell Hull Building
Nashville, TN 37243

Dear Senator Crowe:

As required by Tennessee Code Ann. §68-11-251 and §68-140-321(e), we are pleased to submit the annual report on the Emergency Medical Services for Children (EMSC) program; the Board for Licensing Health Care Facilities and the Emergency Medical Services Board collaborated with the Committee on Pediatric Emergency Care (CoPEC) in preparation of the report. The TN EMSC program focuses primarily on enhancing access to quality pediatric pre-hospital and hospital care, with consideration for injury prevention, disaster preparedness, and patient safety. This report reflects activities and accomplishments of the Board for Licensing Health Care Facilities and the Emergency Medical Services Board in meeting national EMSC objectives.

Improving the availability and quality of children's health care is a major goal for the state of Tennessee and the Department of Health. Our boards help coordinate the role of Tennessee's medical facilities and emergency medical services in providing appropriate pediatric emergency care.

Respectfully submitted,

A handwritten signature in cursive script that reads "Rene C Saunders MD".

Rene Saunders, M.D., Chair
Board for Licensing Health Care Facilities

Sullivan Smith, MD
Digitally signed by Sullivan
Smith, MD
Date: 2022.06.21 08:04:32 -05'00'

Sullivan Smith, MD, Chair
Emergency Medical Services Board

C: Lisa Piercey, MD, MBA, FAAP, Commissioner
Tennessee Department of Health

Joint Report to the
Health and Welfare Committee
Of the Senate and
Health Committee
Of the House of Representatives

Report on the Status of Emergency Medical Services for Children

A Report to the 112th Tennessee General Assembly

Tennessee Department of Health
July 2022

Joint Annual Report of
The Board for Licensing Health Care Facilities
And the
Emergency Medical Services Board
To the
Tennessee General Assembly
General Welfare Committee of the Senate
Health and Human Resources Committee of the House of Representatives
On the Status of
Emergency Medical Services for Children

July 1, 2022

I. Requirement of the Report

Tennessee Code Annotated § 68-140-321(e) and §68-11-251 requires that the Board for Licensing Health Care Facilities and the Emergency Medical Services Board in collaboration with the Committee on Pediatric Emergency Care (CoPEC) shall jointly prepare an annual report on the current status of emergency medical services for children (EMSC) and on continuing efforts to improve such services beginning July 1, 1999.

The mission is “to ensure that every child in Tennessee receives the best pediatric emergency care in order to eliminate the effects of severe illness and injury.”

The vision statement is “to be the foremost advocate for children throughout the continuum of care in Tennessee and the nation.”

II. Executive Summary

The Committee on Pediatric Emergency Care (CoPEC) in partnership with the Tennessee Department of Health created access to quality pediatric emergency care through establishing regional networks of care to ill and injured children 24 hours a day, 365 days a year. Emergency medical and trauma care services are defined as the immediate health care services needed as a result of an injury or sudden illness, particularly when there is a threat to life or long-term functional abilities.

Prior to the establishment of CoPEC there were significant barriers to access quality emergency care for children. It is important to understand that the delivery of healthcare to children is much different than adult care. “Children are not small adults,” and these differences place children at a disproportionate risk of harm. Examples include:

- Rescuers and other health care providers may have little experience in treating pediatric patients and may have emotional difficulty dealing with severely ill or injured infants and children.
- Providers not familiar with many of the unique anatomic and physiologic aspects of pediatric trauma, such as unique patterns of chest injury, head injury, cervical spine injury, and abdominal injuries, may make assessment and treatment errors.
- Medication dosing for children is based on weight and/or body surface area whereas with adults there is typically a standard dose for a medication regardless of age or weight. Children are therefore more prone to medication dosing errors by inexperienced health care providers who do not take weight-based dosing into account. They many times do not fully understand the dangers inherent with metric conversion when weight is reported or documented in pounds. Children also require equipment specifically designed to meet their anatomic and physiologic requirements.
- Children can change rapidly from a stable to life-threatening condition because they have less blood and fluid reserves. Assessment of these patients can be challenging to inexperienced providers.
- Children have a smaller circulating blood volume than adults making them more vulnerable to irreversible shock or death. Children are particularly vulnerable to aerosolized biological or chemical agents because their more rapid respiratory rate may lead to increased uptake of an inhaled toxin. Also, some agents (i.e. sarin and chlorine) are heavier than air and accumulate close to the ground – right in the breathing zone of smaller children.

A child's outcome depends on factors including:

- Access to appropriately trained health care providers including physicians, nurses and EMS professionals
- Access to properly equipped ambulances and hospital facilities
- Location of comprehensive regional pediatric centers and other specialized health care facilities capable of treating critically ill and injured children

CoPEC has spent over two decades ensuring access to quality emergency care for all children in our state. This has been achieved through the institutionalization of pediatric specific rules and regulations that govern hospital facilities and EMS services. These rules and regulations now require different size equipment specific for children and personnel training. The rules and regulations for hospitals can be found at <https://publications.tnsosfiles.com/rules/1200/1200-08/1200-08-30.20161016.pdf> and EMS services at [https://www.tn.gov/content/dam/tn/health/events/7.7.18PDF%20TN%20EMS%20Protocol%20Guidelines%20-%20Mar2018%20\(R%207.7.18\).pdf](https://www.tn.gov/content/dam/tn/health/events/7.7.18PDF%20TN%20EMS%20Protocol%20Guidelines%20-%20Mar2018%20(R%207.7.18).pdf).

Approximately 3 out of 4 children less than 18 years of age were seen in Tennessee's emergency departments with approximately 23% being seen at one of the four Comprehensive Regional Pediatric Centers (CRPCs). These CRPCs include Le Bonheur Children's Hospital in Memphis, Monroe Carell Jr. Children's Hospital at Vanderbilt in Nashville, Children's Hospital at Erlanger in Chattanooga, and East Tennessee Children's Hospital in Knoxville.

Within each CRPC is a coordinator (or coordinators) charged with going out into the community to offer pediatric education opportunities to prehospital and hospital providers. These opportunities can be classified as simulation/mock codes, lectures, courses, hospital site visits and community engagement events. Throughout the last year, thousands of providers from across the state have been directly impacted by the efforts of the CRPC Coordinators. Coordinators play an integral role in ensuring the system of care of children is exceptional. Every child deserves to receive the best care possible, no matter where they live in the state. From May 1, 2021 to April 30, 2022, there were over 161 educational encounters (simulation/mock codes, lectures, courses, and hospital site visits) in Tennessee. Lectures and courses were conducted in-person and virtually.

A key role for CoPEC is to support the implementation of clinically appropriate evidence-based care for all children in Tennessee, regardless of what facility, EMS service or physician provider delivers that care. This is accomplished through the standardization of rules and regulations, education to all providers and continuous quality improvement activities. Each year national performance measures for EMS are measured by state. These national performance measures work to improve the care children received across Tennessee and the country.

TN EMSC is playing a vital role in offering feedback and input regarding the measures demonstrating that our state's program is highly regarded for its status as a leader in pediatric emergency care. Data collection as a quality improvement initiative is a key piece of enhancing the emergency medical services for children system in Tennessee. Each child whose care necessitates greater subspecialty pediatric care than their local community can provide, is transferred to one of the four CRPCs. Since 2011, the CRPC coordinators at each of the four locations continues to review patient's charts and records to identify opportunities for quality improvement. To address the needs of providers across the state, the coordinators use this information to offer educational outreach and trainings that cater to the various needs identified.

One of the most significant strengths of CoPEC is the involvement and participation of various stakeholders from across the state that advises the Tennessee Department of Health. These volunteers include EMS providers, doctors, nurses, parents of children with special needs, and professional organizations (Appendix 1).

Key Accomplishments in Fiscal Year (May 1, 2021 to April 30, 2022)

A. 2019-2023 Strategic Plan

Data Goal: TN EMSC will utilize data to assess outcomes of pediatric emergency care, identify gaps in outcomes and/or care delivery processes, plan appropriate improvement interventions and evaluate the effectiveness of TN EMSC programs and services.

EMS agencies were invited to participate in a nationwide assessment to help better understand the utilization of Pediatric Education Care Coordinators being used along with the utilization of pediatric specific equipment. Below captures the result for the HRSA EMS Guideline measures. Congress has mandated that this survey will be

conducted on an annual basis.

The most recent survey was conducted January – March 2022. Tennessee had a response rate of 99.1%. The data results from this survey will be available Fall 2022.

Findings for 2021 Survey

Pediatric Call Volume by Number and % of Agencies:

	Num of Agencies	% of Agencies
HIGH: More than 600 pediatric calls in the last year (more than 50 pediatric calls per month)	13	11.5%
MEDIUM HIGH: Between 101-600 pediatric calls in the last year (8 - 50 pediatric calls per month)	29	25.7%
MEDIUM: Between 13-100 pediatric calls in the last year (1 - 8 pediatric calls per month)	55	48.7%
LOW: Twelve (12) or fewer pediatric calls in the last year (1 or fewer pediatric calls per month)	14	12.4%
NONE: No Pediatric Calls in the Last Year	2	1.8%
Grand Total	113	100.0%

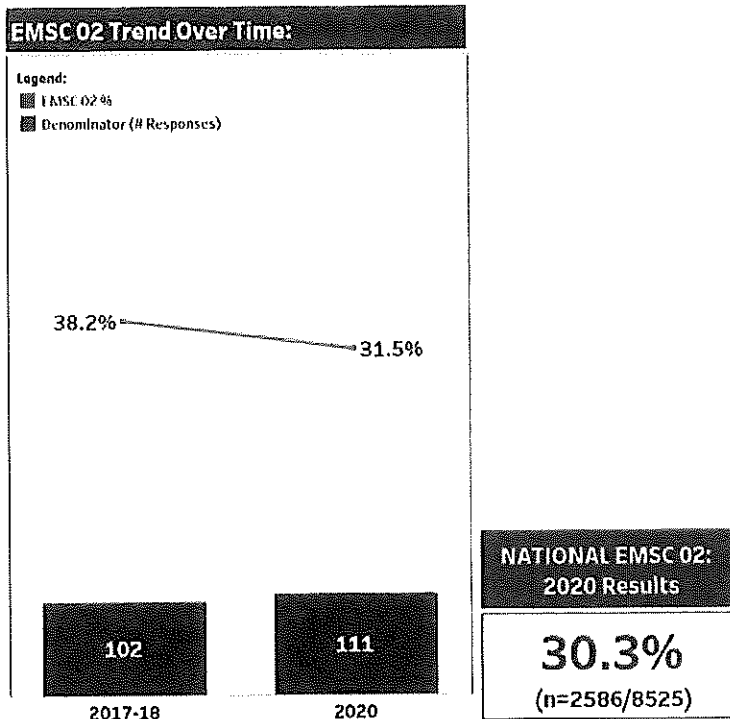
PEDIATRIC EMERGENCY CARE COORDINATOR

Pediatric Emergency Care Coordinator (EMSC 02):

31.5%
(35/111)

(Exclusions: See Above)

A respondent needed to answer YES to "Having a designated individual who coordinates pediatric emergency care" in the survey to meet this measure.



Pediatric Emergency Care Coordinator:

Has a PECC	31.9% (n=36)
Plans to Add a PECC	4.4% (n=5)
Interested in a PECC	23.0% (n=26)
No PECC	40.7% (n=46)

Pediatric Emergency Care Coordinator Oversees:

Oversees Multiple Agencies	30.6% (n=11)
Oversees Only Our Agency	69.4% (n=25)

Agencies who Have a PECC - Reported PECC Duties:

Promotes pediatric continuing education opportunities	100.0%
Oversees pediatric process improvement initiatives	100.0%
Ensures that fellow providers follow pediatric clinical practice guidelines and/or protocols	97.2%
Ensures that the pediatric perspective is included in the development of EMS protocols	97.2%
Promotes agency participation in pediatric prevention programs	88.9%
Ensures the availability of pediatric medications, equipment, and supplies	83.3%
Coordinates with the emergency department pediatric emergency care coordinator	77.8%
Promotes agency participation in pediatric research efforts	52.8%
Promotes family-centered care	52.8%
Other Activities	33.3%

USE OF PEDIATRIC SPECIFIC EQUIPMENT MATRIX

Use of Pediatric-Specific Equipment (EMSC 03):

43.2%

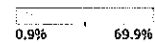
(48/111)

(Exclusion: See Above)

See pg. 25 in the "EMSC for Children Performance Measures Implementation Manual for State Partnership Grantees - Effective March 1st, 2017" for an explanation of the scoring.

Use of Pediatric-Specific Equipment Matrix:

% of Agencies:



	Two or more times per year (4pts)	At least once per year (2pts)	At least once every two years (1pt)	Less frequency than once every two years (0 pts)	None
How often are your providers required to demonstrate skills via a SKILL STATION?	33.6% (n=38)	46.9% (n=53)	5.3% (n=6)		14.2% (n=16)
How often are your providers required to demonstrate skills via a SIMULATED EVENT?	24.8% (n=28)	39.8% (n=45)	11.5% (n=13)	0.9% (n=1)	23.0% (n=26)
How often are your providers required to demonstrate skills via a FIELD ENCOUNTER?	13.3% (n=15)	13.3% (n=15)	1.8% (n=2)	1.8% (n=2)	69.9% (n=79)

This matrix was used to score the type of skill demonstration/simulation and the frequency of occurrence. A score of 6 pts or higher "met" the measure. The darker the box the higher the percentage of agencies in that group. See pg. 35 in the "EMSC for Children Performance Measures, Implementation Manual for State Partnership Grantees, Effective March 1st, 2017" for additional information about this matrix.

Use of Pediatric-Specific Equipment:

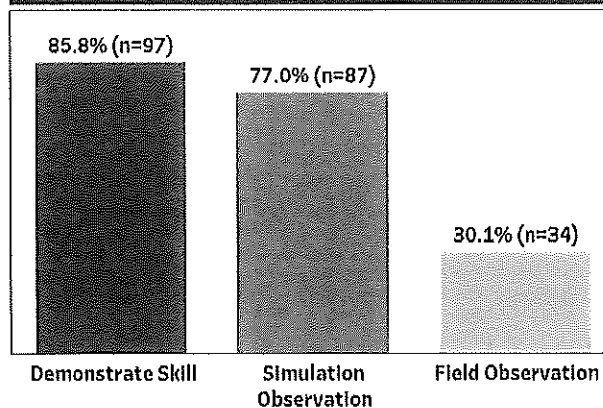
6 pts or Higher

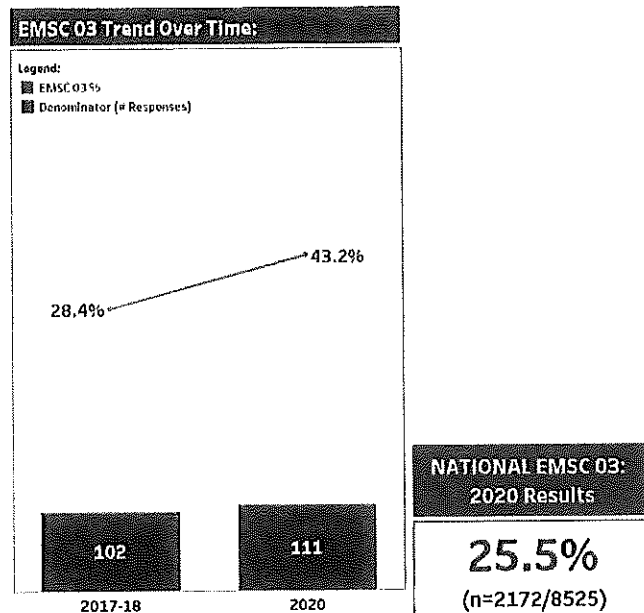
43.4% (n=49)

Less than 6 pts

56.6% (n=64)

Percent and Type/Method of Skill Checking Reported:





Hospitals were invited to participate in a nationwide assessment called the National Pediatric Readiness Assessment to help better understand the pediatric readiness of hospitals across the country. The last time this survey was conducted was in 2014.

The most recent survey was conducted May-July 2021. Tennessee had a response rate of 79.1%. The data results from this survey are below.

Findings for 2021 Survey

2021 Pediatric Readiness Response Rate

Numerator: 91
 Denominator: 115
 Response Rate: 79%

2021 Average State Score

82

State AVERAGE Hospital
 Score out of 100
 (n=88)

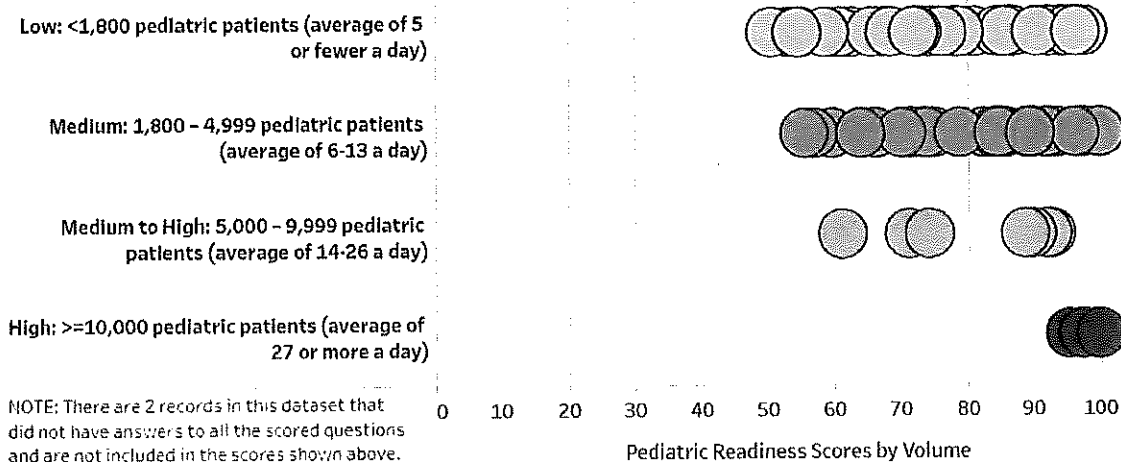
2021 Median State Score

85

State MEDIAN Hospital
 Score out of 100
 (n=88)

NOTE: There are 2 records in this dataset that did not have answers to all the scored questions and are not included in the scores shown above.

2021 Distribution of Scores by Volume

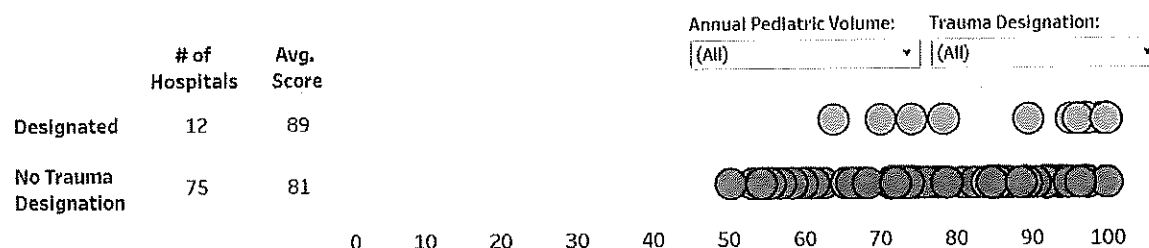


Breakdown of Scores by Volume Type:

Annual Pediatric Volume	# of Hospitals	Avg. Score	Median Score	Min. Score	Max. Score
Low: <1,800 pediatric patients (average of 5 or fewer a day)	42	79	79	50	98
Medium: 1,800 – 4,999 pediatric patients (average of 6-13 a day)	31	82	85	56	100
Medium to High: 5,000 – 9,999 pediatric patients (average of 14-26 a day)	8	83	89	61	93
High: ≥10,000 pediatric patients (average of 27 or more a day)	7	98	98	95	100
Grand Total	88	82	85	50	100

NOTE: There are 2 records in this dataset that did not have answers to all the scored questions and are not included in the scores shown above.

Breakdown of Scores by Trauma Designation



NOTE: There are 2 records in this dataset that did not have answers to all the scored questions and are not included in the scores shown above.

Average Scores By Section

Section	Missing Records	Avg Section Score	Possible Score
Guidelines for Administration and Coordination of the ED for the Care of Children (19 pts)	0	11.4	19
Physicians, Nurses, and Other Health Care Providers Who Staff the ED (10 pts)	0	6.3	10
Guidelines QI/PI in the ED (7 pts)	0	4.6	7
Guidelines for Improving Pediatric Patient Safety in the ED (14 pts)	1	13.2	14
Guidelines for Policies, Procedures, and Protocols for the ED (17 pts)	1	14.0	17
Guidelines for Equipment, Supplies, and Medications for the Care of Pediatric Patients in the ED (33 pts)	2	32.3	33

NOTE: If there are missing values from any of the assessments (specifically from PDF assessments), they are shown in the "Missing Records" column. This indicates records that were missing scored questions and could not be included in the calculation of the average section score.

Membership Goal: To develop and sustain membership quality and support to achieve optimal organizational mission delivery.

Findings	Action
Member participation varies greatly.	<ul style="list-style-type: none"> • Member attendance tracked. • CEOs of hospitals, agencies and organizations updated quarterly on member participation. • Review positive outcome cases to emphasize origins of CoPEC. • Guest speakers present at CoPEC meetings to share local, state and national resources with members. • Sub-committees are being re-established now that CoPEC is meeting in-person again.

Standardization Goal: Best evidence-based pediatric emergency care for every patient in every location of Tennessee.

Findings	Action
EMS pediatric transportation addressed based on recent evidence based pediatric practice	A rural health grant provided 175 devices for EMS agencies that actively participates in Tennessee's Pediatric Emergency Care Coordinator program.
Emergency Guidelines for Schools	The Emergency Guidelines for Schools was updated. This guide provides basic medical

	treatment for non-nursing school staff to care for students in an emergency until a school nurse is available.
Pediatric Education Modules	A CoPEC working group was created to develop educational training modules that cover the various topics outlined on Tennessee's EMS State Protocols. The videos will be housed on the CECA website for easy viewing as refresher training on pediatric topics.
Need to exercise the infrastructure of disaster response for the pediatric population.	Pediatric patients included in discussions of each of the eight healthcare coalitions disaster drill planning.
<p>Maintaining the National EMSC Performance Measures including:</p> <ul style="list-style-type: none"> • Percent of hospitals recognized through a statewide, territorial, or regional system that are able to stabilize and/or manage pediatric Medical and trauma emergencies. • Percent of hospitals that have written interfacility transfer agreements and guideline components 	<ul style="list-style-type: none"> • Standards for Pediatric Emergency Care Facilities were revised to reflect current evidenced based care, and updated recommendations were submitted through the legislative process. This work involves CoPEC members and pediatric content experts who meet regularly to discuss and collaborate on the proposed updates. This work requires committed and dedicated individuals across our state who devote their time and talent to this important work. Interpretive guidelines will be written once proposed standards are approved. • CRPC Coordinators worked with hospitals in their respective regions to be best prepared for the National Pediatric Readiness Project Assessment that they could be.

Funding goal: Increase revenue base

Findings	Action
Congress approved the federal funding of the EMSC program	HRSA grant has been approved for another 5-year duration.
Funding needed for pediatric transportation safety device	<ul style="list-style-type: none"> • Secured \$121,800 grant from HRSA to fund 175 devices for distribution to agencies in rural counties that participate in the Pediatric Emergency Care Coordinator (PECC) program. • Goal is to outfit every ambulance with a device if it currently does not have one available.

	<ul style="list-style-type: none"> Continuing to work with the EMS Board Ambulance Committee on standardizing requirements based on national evidence-based recommendations.
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B. All TN EMSC stakeholders will recognize the TN EMSC program as a resource and authority for providing the best emergency care information and guidance for caring for critically ill or injured children in Tennessee.

Continuation of the TN EMSC website (www.cecatn.org) which contains content to enhance access to quality pediatric emergency care, has been maintained throughout the year. Available educational opportunities and resources have been updated routinely on the website and distributed via e-mail to TN EMS Consultants, CRPC Coordinators and the state healthcare coalition advisory council for further distribution.

C. National Performance Measures

Tennessee has demonstrated achievement with all previous HRSA/MCHB Performance Measures. These included:

- By 2022, 25 percent of hospitals are recognized as part of a statewide, territorial, or regional standardized program that can stabilize and/or manage pediatric medical emergencies. Tennessee has met this performance measure at 100% as all hospitals go through state designation program.
- By 2022, 50 percent of hospitals are recognized as part of a statewide, territorial, or regional standardized system that recognizes hospitals that can stabilize and/or manage pediatric trauma. Tennessee has met this performance measure at 100% as all hospitals go through state designation program.
- By 2021, 90 percent of hospitals in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer. As of 2021, Tennessee was at 69% of hospitals with an Interfacility Transfer Guideline and 93.1% of Tennessee hospitals have an Interfacility Transfer Agreement. Updated survey results will be published later 2022.
- Goal: To increase the number of states and territories that have established permanence of EMSC in the state or territory EMS system.
 - Each year: All Components Achieved
 - The EMSC Advisory Committee has the required members as per the implementation manual.
 - The EMSC Advisory Committee meets at least four times a year.

- Pediatric representation incorporated on the state or territory EMS Board.
- The state or territory requires pediatric representation on the EMS Board.
- One full-time EMSC Manager is dedicated solely to the EMSC Program.

Spring 2017 New HRSA Performance Measures were added and a strategic plan to achieve these four measures has been developed and will be achieved by stated year.

- By 2027, EMSC priorities will be integrated into existing EMS, hospital, or healthcare facility statutes or regulations. This will be met through the proposed pediatric emergency facility standards.
- By 2021, 80 percent of EMS agencies in the state or territory will submit NEMSIS version 3.x-compliant patient-care data to the State EMS Office for all 911-initiated EMS activations.
 - Tennessee Department of Health, Division of EMS awarded a contract to ImageTrend and compliance has been met.

New National Performance Measures for EMS were published in 2020 and a national survey with a 100% response rate from EMS agencies with 911 services.

- By 2026, 90 percent of EMS agencies in the state or territory will have a designated individual who coordinates pediatric emergency care. TN is currently at 31.5% TN and the nation is at 30.3%. Updated survey results will be published later 2022.
- By 2026, 90 percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric specific equipment, which is equal to a score of 6 or more on a 0–12 scale. TN is currently at 43.2% TN and the nation is at 25.5%. Updated survey results will be published later 2022.

D. Educational outreach, publications and presentations to promote the goal of deploying the best evidence-based pediatric emergency care for every patient in every location of Tennessee.

1. Education

The *21st Annual Update in Acute and Emergency Care of Pediatrics Conference* hosted by East Tennessee Children's Hospital was held on April 20-21, 2022. This event was held in a hybrid format, both in-person and virtual options were available. There were 140 participants in attendance at this conference, registered attendees were broken down between the following credential levels:

Physicians, PA, APN – 31

CoPEC Annual Report 2022

Nurse – 56
EMS – 40
Allied Health – 4
Non-Licensed Students - 5
Other - 4

See Appendix 2 for additional conference details on this conference.

2. TN EMSC Impact to National EMSC program

This past year Tennessee contributed as a leader to the National EMSC Program. TN EMSC program participates on several national EMSC committees. These include the Disaster Domain Steering Committee, EMSC Innovation and Improvement Center's (EIIC) Metrics Subcommittee, Pediatric Emergency Care Coordinator (PECC) Community of Practice (COP), the NASEMSO Pediatric Emergency Care (PEC) Council and several NASEMSO working groups, the PEC Southern States Chapter, and the American College of Pediatrics (AAP) Pediatrics Readiness Subcommittee.

The National EMSC conference was held virtually from August 31-September 2, 2021.

PECC (Pediatric Emergency Care Coordinator) Workforce Development Collaborative (PWDC): TN EMSC participated in this EMSC Innovation and Improvement Center's QI collaborative. This collaborative is to assist state programs in accelerating their progress in improving the pediatric readiness of emergency departments (EDs) and to develop a program to recognize EDs in their state that are ready to care for children with medical emergencies. State improvement teams will benefit by interacting with experts in both pediatric readiness and facility recognition, as well as a cadre of QI specialists.

3. Poster Presentations

Ayers C, Thornton CJ, Quinn E, Canady H, Johnson DP, Humphrey E, Estrada C, Frazier SB. Self Service to Full Service: Improving the Pediatric Emergency Department Utilization of Onsite Outpatient Pharmacy for Prescription Fulfillment. Poster Presentation, Pediatric Academic Societies Conference, Denver, CO, April 2022

Ayers C, Johnson DP, Frazier SB. Optimizing Post-Intubation Sedation in the Pediatric Emergency Department Through High Reliability Interventions. Poster presentation, American Academy of Pediatrics National Conference, 2021; and Society for Pediatric Sedation, Poster presentation, Virtual, September 2021; Platform presentation, Pediatric Academic Societies Meeting, April 2022

Barton M, Smith HE, Lin S, Crants S, Antoun J, Ferguson K, Morris E, Arnold DH, Sara Lin, Shelby Crants, Jacqueline Antoun. "Lights on!" Improving time to phototherapy for neonates with hyperbilirubinemia in the Emergency Department. Poster presentation, Monroe Carell Jr. Children's Hospital at Vanderbilt, Department of Pediatrics Research Day, Poster presentation, Nashville, TN, April 2022

Frazier SB, Wong A, Betters K, Daly C, Root M, Hanson HR. Predictors of Adequate Post-Intubation Sedation in a Pediatric Emergency Department. Poster presentation, Pediatric Academic Societies Meeting, Denver, CO, April 2022

Frazier SB, Fain, E, Otilio JK, Walsh, M, Patterson B. Improving Critical Care Documentation Accuracy in a Pediatric Emergency Department. Poster presentation, American Academy of Pediatrics National Conference, Virtual, October 2021

Overfield J, Lopez M, Blakely M, Godfrey C, Danko M, Hernanz-Schulman M, Patel A, Frazier SB. Reducing Computed Tomography Imaging for Suspected Appendicitis in the Pediatric Emergency Department. Poster presentation, APA Quality Improvement Meeting, Denver, CO, April 2022

Gruenberg B, Crane G, Levine MC, Harrison NJ, Arnold DH. Pilot Study to Develop a Clinical Prediction Rule for Intussusception. Pediatric Academic Society of Academic Emergency Medicine National Conference, Poster presentation, New Orleans, LA, April 2022

Smith HE, Arnold DH, Frazier SB, Gay JC, Kleinman EA, Wong A, Levine MC. Suicidal Behaviors and Associations with Patient Characteristics in Children Before and During the SARS-CoV-2 Pandemic. Pediatric Academic Societies Conference, Poster presentation, Denver, Colorado, April 2022

4. Lecture Presentations

Arnold DH. Keynote Speaker, Arkansas Children's Hospital 2022 Research Retreat, Grand Rounds: Asthma Attack: Paradigm for the safe Emergency Department. Lecture: The febrile young infant: Cutting the Gordian Knot

Arnold DH. Cumberland Pediatric Foundation Education Series: The febrile young infant: Cutting the Gordian Knot

Ayers C, Johnson DP, Frazier SB. Don't Forget the Sedation! Optimizing Post-Intubation Sedation in the Pediatric Emergency Department. Oral Presentation, Pediatric Academic Societies Meeting, Denver, CO, April 2022

Frazier SB, Lopez M, Site Review: Reducing Computed Tomography Imaging for Suspected Appendicitis. Oral Presentation, American College of Surgeons Pediatric Surgery Quality Collaborative Quarterly Meeting, Denver, CO, April 2022

Gruenberg B, Crane G, Harrison NJ, Arnold DH, Levine MC. Utility of Screening Abdominal Radiographs in Suspected Intussusception. Pediatric Academic Society of Academic Emergency Medicine National Conference, New Orleans, LA, May 2022

Levine MC. Lung US For Emergent Lung conditions in Pediatrics." Pediatric Emergency Medicine Fellowship Educational Conference. Cohen Children's Hospital. Long Island, NY, August 2021

Levine MC. 'Industry Relations Panel,' Society of Clinical Ultrasound Fellowships National Meeting, Nashville, TN, September 2021

Roach B. 'Pediatric Drowning: From Incident to Injury Prevention," 21st Annual Acute and Emergency Care Pediatrics Conference, Sevierville, TN, April 2022

5. Journal Publications

Anderson T, Harrell C, Snider M, Kink R. The Safety of High-Dose Intranasal Fentanyl in the Pediatric Emergency Department. *Pediatr Emerg Care*. 2022 Feb 1;38(2):e447-e450. doi: 10.1097/PEC.0000000000002627. PMID: 35100749

Antoon JW, Nian H, Ampofo K, Zhu Y, Sartori L, Johnson J, Arnold DH, Stassun J, Pavia AT, Grijalva CG, Williams DJ. Validation of childhood pneumonia prognostic models for use in emergency care settings in the United States. Under review

Arnold DH, Gong W, Antoon JW, Bacharier LB, Stewart TG, Johnson DP, Akers WS, Hartert TV. Prospective observational study of clinical outcomes after intravenous magnesium for moderate and severe acute asthma exacerbations in children. *J Allergy Clin Immunol Pract*. 2021 Dec 13:S2213-2198(21)01366-0. doi: 10.1016/j.jaip.2021.11.028. Online ahead of print. PMID: 34915226

Holland JR, Arnold DH, Hanson HR, Solomon BJ, Jones NE, Anderson TW, Gong W, Lindsell CJ, Crook TW, Ciener DA. Assessment of performance of non-technical skills by medical students in simulated scenarios. Under review

Sekmen M, Johnson J, Zhu Y, Sartori LF, Grijalva CG, Stassun J, Arnold DH, Ampofo K, Robison J, Gesteland PH, Pavia AT, Williams DJ. Association Between Procalcitonin and Antibiotics in Children with Community-Acquired Pneumonia. *Hospital Pediatrics*, In Press

Tran DP, Arnold DH, Thompson CM, Richmond NJ, Gondek S, Kidd RS. Evaluating discrepancies in percent total body surface area burn assessments between prehospital providers and burn center physicians. *J Burn Care Res*. 2021. Jul 21:irab131. Doi: 10.1093/jbcr/irab131. Online ahead of print. PMID: 34289051

Barton M, Townsley E, Clewner L. Case 4: Parker, a 3-year-old with Difficulty Breathing (Croup). (Pending Publication 2022, April). In: Cossey M, Gambill, L. *Pediatric Hospital Medicine: A Case-Based Curriculum and Educational Guide* 1e. Itasca, Illinois, United States: American Academy of Pediatrics Publishing

Burger C. Sudden-Onset Black Facial Lesions in an 11-year-old boy. *Pediatrics in Review: Visual Diagnosis*. 2022 Apr 1; 43(4): e9-e11. PMID: 35362032

Burger C, Vendiola DF, Arnold DH. Nebulized albuterol delivery is associated with decreased skeletal muscle strength in comparison with metered-dose inhaler delivery among children with acute asthma exacerbations. *J Amer Coll Emerg Phys Open*. 2021. doi: 10.1002/emp2.12422. PMID: 33855311

Cabo J, Graham K; Chen H, Zhao S, Burger C, Arnold DH, Taylor AS, Tanaka S, Pope J, Clayton DB, Brock JW, Adams C, Adams MC, Thomas J. Increasing Utilization Of The Twist Score In Workup Of Patients With Acute Scrotal Pain: Role In Diagnosis And Risk Stratification. Under review

Allister L, Baghdassaria A, Caglar D, Chapman L, Ciener DA, Fein DM, Graff D, Jacobs E, Jain P, Kane I, Langhan ML, McGreevy J, Nagler J, Mesiana JA, Ngo TL, Rose JA, Seaton K, Stukus K, Vu T, Werner H, Woods R. American Academy of Pediatrics Section on Emergency Medicine Subcommittee of Fellowship Directors. *Pediatr Emerg Care*. 2021 Nov 1;37(11): 585-587. PMID: 34731878

Koff A, Burns R, Auerbach M, Lee B, Pearce J, Ciener D, Augenstein J, Yeung C, Thomas A. Pediatric Emergency Medicine Didactics and Simulation (PEMDAS) Telesimulation Series: Hyperleukocytosis. *MedEdPORTAL*. 2021 Dec 13;17:11205. PMID: 34963902

L Van der Laan, George R, Nesiana JA, Nagler J, Langhan ML, Yen K, Ngo T, Rose JA, Caglar D, Kant S, Ciener D, Feng SY. Virtual Interviewing for Pediatric Emergency Medicine Fellowship - A National Survey. *Pediatr Emerg Care*. 2021 Oct 4 Online ahead of print. PMID: 34608060

Frazier SB, Walls C, Jain S, Plemmons G, Johnson DP. "Reducing Chest Radiographs in Bronchiolitis Through High-Reliability Interventions." *Pediatrics*. 2021 Sep;148(3):e2020014597. doi: 10.1542/peds.2020-014597. Epub 2021 August 3. PMID: 34344801

Arredondo AR, Wilkinson M, Barber RB, Gilmartin T, Levine MC. Ultrasonographic Evaluation of Physiologic Free Intraperitoneal Fluid in Healthy Children: A Prospective Observational Study. *J Ultrasound Medicine*. July 2021. PMID 34338342

Truong TV, Gruenberg B, Ciener D, Butcher R. Hives and Fever in a 13-year-old Boy. *Pediatr Rev*. 2022 Jan 1;43(1):49-53. PMID: 34970693

Byrd HR, Hanson HR, Stack LB, Frazier SB. You can't judge a book by its cover: A case of pediatric blast injury. *American Journal of Emergency Medicine*. In press

Gold D, Levine MC, Hsu D, Way DP, Shefrin AE, Lam SHF, Marin JR. Design of a point-of-care ultrasound curriculum for pediatric emergency medicine fellows: A Delphi study. *Academic Emergency Medicine Education and Training*. Aug 2021 1;5(4). PMID34901685

Elliot LE, Petosa JP, Guiot AB, Klein MD, Hermann LE, "Qualitative Analysis of a Virtual Near Peer Facilitated Pediatric Boot Camp Elective." *Medical Science Educator* (2022): <https://doi.org/10.1007/s40670-021-01466-w>

Hallett TC, Solomon B, Ciener DA. Hypothyroidism presenting as myxedema coma in a teenager. *Am J Emerg Med*. 2021 Jul;45:688.e1-688.e2. PMID: 33485736

Morales A, Walsh R, Brown W, Checinski P, Williams SR. Phenazopyridine-induced sulfhemoglobinemia in an 83-year-old presenting with dyspnea. J Emerg Med 2021;61:147-50. PMID: 34034895

6. Injury Prevention

Injury prevention is an integral component of the EMS for children continuum of care. A CoPEC representative is an active member on the Commissioner's Council on Injury Prevention and Tennessee's Suicide Prevention Task Force.

Each of the four comprehensive regional pediatric centers (CRPC) have robust injury prevention programs. Together, the CRPCs have had hundreds of events in Tennessee to keep children safe.

To develop injury prevention programs each CRPC reviews their local injury data and develops targeted interventions to keep children safe. Some key programs that each CRPC hospital has focused on this past year include:

East Tennessee Children's Hospital – bike safety, burns and scalds, car seat safety, heatstroke safety, medication safety, playground safety and water safety

Children's Hospital at Erlanger – pediatric falls, bike safety, furniture tip-over safety, playground safety and trampoline safety

Monroe Carell Jr. Children's Hospital at Vanderbilt - Be in the Zone (a teen driver safety program), Kohl's Stay Seat Smart Program (a child passenger safety initiative) Ride on TN (an ATV safety program)

Le Bonheur Children's Hospital – lawn mower injury prevention, poison prevention and traumatic head injury prevention

Below are other initiatives that Children's Emergency Care Alliance and/or CoPEC are involved with:

Safe Kids Program: One of the initiatives that each CRPC is actively engaged in is **Safe Kids**. Safe Kids is an international campaign, focusing on preventing the serious injuries-- the leading health risk that children face today. The risk areas the CRPCs address include home safety, firearm, car and road safety, sports and play safety.

There is also a collaboration with **Brain Links**, an organization that provides professional development trainings for those who serve people of all ages who have a brain injury. In addition to family education, their trainings support those who serve young children, such as daycare professionals, educators, school nurses and statewide athletic organizations in schools and the community. They have partnered with TN's Chapter of the American Academy of Pediatrics regarding Concussion Management and returning to home and school settings following an injury.

Safe Stars Initiative: There is also a CoPEC representative involved with the Safe Stars initiative which is a program that recognizes youth sports leagues throughout Tennessee for providing the highest level of safety for their young athletes. Safe Stars is a collaboration

between the Tennessee Department of Health and the Monroe Carell Jr. Children's Hospital at Vanderbilt. Safe Stars' goal is to provide resources and opportunities for every youth sports league to enhance their safety standards. The criteria for achieving recognition as a Safe Stars league has been developed by a committee of health professionals dedicated to reducing sports-related injuries among youth.

Children in Disaster: Children's Emergency Care Alliance actively participates with this task force. The Mid-Cumberland sector hosted a child car seat safety weekend event. Car seats were handed out to families in need, education on how to properly secure a child in a vehicle was provided and car seat checks were performed.

G. Star of Life Awards Ceremony and Dinner

The Star of Life Awards ceremony is held to honor the accomplishments of EMS personnel from all regions of Tennessee who provide exemplary life-saving care to adult and pediatric patients. The 14th occurrence of this event was held on May 4, 2022. The emcee for the ceremony was Greg Miller, the Chief at Sumner County EMS. The ceremony included the presentation of the actual adult or pediatric patient scenarios and reunited the EMS caregivers with the individuals they treated. Recipients were chosen from all eight of the EMS regions in the state that provided nominations. A new award was created this year to include organizations that provide care in Tennessee that do not fall within one of the eight regions. This is the premier event within the state to recognize and honor our excellent pre-hospital providers.

2022 Award Recipients

Overall State Winner: Michael G. Carr State Star of Life Award

Washington County / Johnson City EMS

EMS Region 1: Hawkins County Rescue Squad, Hawkins County EMS, Hawkins County EMA, Hawkins County Emergency Communications District, Church Hill Rescue Squad, Lakeview Volunteer Fire Department, Rogersville Fire Department, Striggersville Volunteer Fire Department, Highlands Emergency Air Rescue & Transport, Hawkins County Sheriff's Office

EMS Region 2: Rural/Metro Fire, Knox County Rescue

EMS Region 3: CareMed EMS of TN, UT Lifestar, AMR McMinn

EMS Region 4: Cumberland County EMS, Crossville/Cumberland County Central Communications, Erlanger Life Force, Cumberland County Fire Department, Cumberland County Sheriff's Office

EMS Region 5: Vanderbilt LifeFlight, Air Methods, Air Methods AirCom, Robertson County EMS, Robertson County 911, Orlinda Fire Department, White House City Fire Department

EMS Region 6: Perry County Emergency Medical Service, Perry County E-911, Air Methods Communications, Vanderbilt LifeFlight

EMS Region 8: Shelby County Fire Department, Shelby County Sheriff's Office, Shelby County Fire Department Communications, Shelby County Sheriff's Office Communications

Mutual Aid Partnership Award: Great Smoky Mountains National Park, Tennessee Army National Guard

H. Awards

The TN EMSC Joseph Weinberg, MD, Leadership Award is bestowed upon an individual who displays the attributes of a leader that can bring together diverse stakeholders and organizations to improve the care of critically ill and injured children. This award is presented in conjunction with the Annual Update in Emergency Care Pediatrics Conference and was presented on April 21, 2022. This year's award was given to **Kevin Brinkmann, MD** for his dedication to Tennessee's children and moving forward the system of pediatric care. Dr. Brinkmann consistently demonstrates the leadership skills of Dr. Weinberg including pediatric expertise, advocacy, and civic duty. He demonstrates this in a multitude of ways, as he actively participates in leadership roles on the Committee of Pediatric Emergency Care and Children's Emergency Care Alliance. Most notably, he serves as the Standards Committee Chair for CoPEC and was instrumental in the most recent standard revision proposal that was submitted to legislation in 2020.

The TN EMSC Advocate for Children Award is given to an individual who has made an outstanding contribution of major significance to the Tennessee Emergency Medical Services for Children program. This award is presented in conjunction with the Annual Update in Emergency Care Pediatrics Conference and was presented on April 21, 2022. This year's award recipient is **Candace Wilkes** for her exemplary dedication to the well-being of children. Ms. Wilkes was nominated due to her commitment in providing the EMS agencies in the Region 6 healthcare coalition jurisdiction with 50 pediatric safety transport devices.

III. The Needs of the State Committee on Pediatric Emergency Care met by the Tennessee Department of Health since last year's annual report.

- Participation and input from Tennessee Department of Health staff implementing the strategic plan.

IV. The Needs of the State Committee on Pediatric Emergency Care

- Ongoing support to achieve the goals of the 2019-2023 Strategic Plan to meet the needs of ill and injured children.
- Ongoing statistical support to assist in defining outcomes of emergency care for pediatrics.
- Ongoing input, questions or ideas on pediatric emergency care gaps identified during normal business operations brought to CoPEC for review and recommendation development.

V. Conclusion

The mission of CoPEC is *to ensure that every child in Tennessee receives the best pediatric emergency care in order to eliminate the effects of severe illness and injury*. That mission draws people together and has brought out the very best in our healthcare system.

The Board for Licensing Health Care Facilities and the Emergency Medical Services Board work cooperatively with other programs of the Tennessee Department of Health to improve the quality of health care and medical services available to the citizens of Tennessee.

We will further describe the impact of the rules on pediatric emergency care by utilizing data collected in our next report on July 1, 2023.

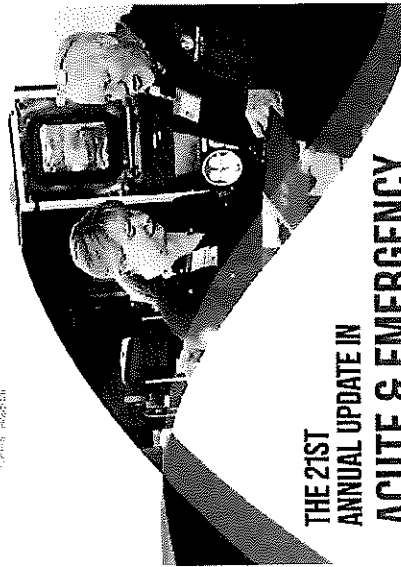
This report was reviewed by the respective boards on June 1, 2022 and June 15, 2022 and approved for presentation to the designated committees of the Tennessee General Assembly.

Appendix 1

Baptist Memorial Hospital for Women	Tennessee Department of Health
Children's Hospital at Erlanger	TN Disability Coalition
Children's Hospital at TriStar Centennial	Tennessee Emergency Nurses Association
East Tennessee Children's Hospital	Tennessee Emergency Services Education Association
Family Voices of Tennessee	TN Hospital Association
Hospital Corporation of America (HCA)	Tennova Healthcare-Cleveland
Jackson-Madison County General Hospital	UT Medical Center
Le Bonheur Children's Hospital	TN EMS Directors Association
Monroe Carell, Jr. Children's Hospital at Vanderbilt	
Project B.R.A.I.N.	
Niswonger Children's Hospital	
Rural Health Association of Tennessee	
Sumner Regional Medical Center	
TN Academy of Family Physicians	
Tennessee Ambulance Service Association	
Tennessee Association of School Nurses	
TN Chapter of the American Academy of Pediatrics	
TN Chapter of the American College of Emergency Physicians	
TN Chapter of the American College of Surgeons	
TN Congress of Parents and Teachers	

Appendix 2

SPONSORED BY:



THE 21ST ANNUAL UPDATE IN ACUTE & EMERGENCY CARE PEDIATRICS CONFERENCE

April 21-22, 2022

Sevierville Convention Center - Sevierville, TN



THE 21ST ANNUAL UPDATE IN ACUTE AND EMERGENCY CARE PEDIATRICS AGENDA

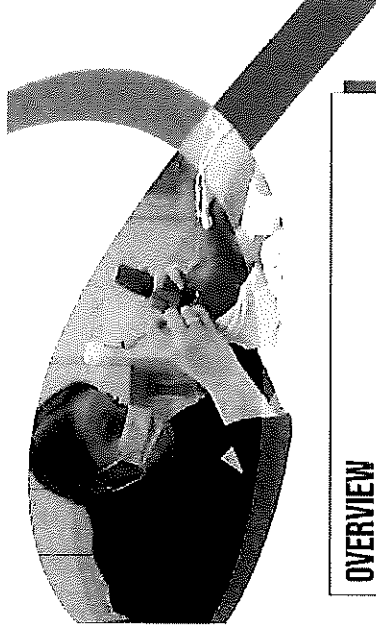
THURSDAY - APRIL 21, 2022				
7:30 a.m. - 8 a.m. EST (6:30 a.m. - 7 a.m. CST)	Breakfast and Registration			
8 a.m. - 8:10 a.m. EST (7 a.m. - 7:10 a.m. CST)	Welcome and Opening Remarks			
8:10 a.m. - 9:10 a.m. EST (7:10 a.m. - 8:10 a.m. CST)	Burning Need to Know: Acute Burn Care Management Debbie Harrell (A)			
9:15 a.m. - 10:15 a.m. EST (8:15 a.m. - 9:15 a.m. CST) Breakout Session #1	Group A (A)	Group B (A)	Time of Grief Mary Palmer, MD	
	A simple approach to addressing pediatric patients, communication, dealing with caregivers and preparation. (Case studies included) Allen Davis, NREMT-P, CCEMT-P, FP-C, Flight Paramedic			
10:15 a.m. - 10:55 a.m. EST (9:15 a.m. - 9:55 a.m. CST)	Break			
10:55 a.m. - 12:05 p.m. EST (9:55 a.m. - 10:20 a.m. CST) Breakout Session #2	Group C (A)	Group D (A)	Group E (A)	My Patient is Contaminated with What?? Managing the Pediatric Patient in a Radiological Incident Angie Bowen, MPS, RIL, CPEN, NRP, IC
	Pediatric Crush Injuries David Carter, CCEMT-P, IC	The Regional Forensics Center: Accurate, Timely, Compassionate & Professional Death Investigation Services Lauren Havilla, DO		
11:20 a.m. - 12:05 p.m. EST (10:20 a.m. - 11:05 a.m. CST)	Lunch			
12:05 p.m. - 1:25 p.m. EST (11:05 a.m. - 12:25 p.m. CST)	Pediatric Trauma - When Tiny Tots Tumble Brittney Aiello, BSN, RN, CPEN (A)			
1:40 p.m. - 2:25 p.m. EST (12:40 p.m. - 1:25 p.m. CST) Breakout Session #3	Group F (A)	Group G (A)	Group H (A)	MIS-C: What We Know Now Nina Lum, MD
	Wilderness Emergencies Chad Ingels, BS	Sweet Child of Mine Zach Surry, MS, NRP, CCEMT-P		
2:25 p.m. - 2:45 p.m. EST (1:25 p.m. - 1:45 p.m. CST)	Break			
2:45 p.m. - 3:45 p.m. EST (1:45 p.m. - 2:45 p.m. CST)	Pediatric Submersion Injury Britta Roach, DO (A)			
3:50 p.m. - 4:50 p.m. EST (2:50 p.m. - 3:50 p.m. CST) General Session	Lessons from the Pandemic: Mental Health Risk and Resilience Within Diverse Family Populations Agnes Costello, MD (A)			

This year's fundraiser will be held in conjunction with the conference. Visit the exhibition hall to see all of our auction items! Can't attend in person? Join us virtually! Visit bid4goodwill.com/ceca to create your online account. All proceeds will benefit Children's Emergency Care Alliance of Tennessee. Happy bidding!

THE 21ST ANNUAL UPDATE IN ACUTE AND EMERGENCY CARE PEDIATRICS AGENDA

FRIDAY - APRIL 22, 2022				
7:20 a.m. - 8:45 a.m. EST (6:30 a.m. - 7 a.m. CST)	Breakfast, Registration & Welcome			
8 a.m. - 9 a.m. EST (7 a.m. - 8 a.m. CST)	Recognizing and Responding to Human Trafficking in a Clinical Setting Ranu Zakaria, MPH (A)			
9 a.m. - 9:20 a.m. EST (8 a.m. - 8:20 a.m. CST)	Break			
9:20 a.m. - 10:05 a.m. EST (8:20 a.m. - 9:05 a.m. CST)	Group I (M)	Group J (A)	Group K (A)	Group L (A)
	Pediatric Fracture Care for Non-surgeons Andrew Gregory, MD	Ventilator Management in the Transport Setting Michael Miller, MD, PhD	Children in Crisis: A Child Life Specialist's Guide to Understanding and Responding to Pediatric Distress Brooks Galt, CCLS, CHES, CPST, QIM	Child Abuse from Report to Prosecution Greg Faulkner
10:10 a.m. - 10:55 a.m. EST (9:10 a.m. - 9:55 a.m. CST)	Group L (A)	Group M (A)	Group N (E)	Group O (E)
	Frequent Issues in Hematite and Deliveries in the Field Daniel Martinez, Barrera, DO	Sports Injury & Head Strokes Matthew McCallister, MD	Child Abuse from Report to Prosecution Greg Faulkner	Plastic Surgery Emergencies: Separating the Wheat from the Chaff Justin Daggett, MD
10:55 a.m. - 11:15 a.m. EST (9:55 a.m. - 10:15 a.m. CST)	Break			
11:15 a.m. - Noon EST (10:15 a.m. - 11 a.m. CST)	Group O (E)	Group P (E & M)	Group Q (M & N)	Group R (M & N)
	Diverse-City Bonnie Hearn, MEd, Paramedic	Special Needs 101: An Overview Jennifer Durham, MSN, RN, CPN, CPEN	Plastic Surgery Emergencies: Separating the Wheat from the Chaff Justin Daggett, MD	Am I My Brother's Keeper? Improving Outcomes Through the Role of Personal Responsibility Chad Hollingsworth, BA, CCEMT-P I/C, FP-C, NRP, RN
12:05 p.m. - 1:05 p.m. EST (11:05 a.m. - 12:05 p.m. CST)	Closing Remarks			
1:35 p.m. - 1:55 p.m. EST (12:35 p.m. - 12:55 p.m. CST)	Closing Remarks			

Target Audience Key	
A = EMS, Nurses, and Medical Providers	
E = EMS	
N = Nurses	
M = Medical Providers	



OVERVIEW

The 21st Annual Update in Acute and Emergency Care Pediatrics Conference is a result of collaboration among East Tennessee Children's Hospital, Children's Hospital at Erlanger, Le Bonheur Children's Hospital, Monroe Carell Jr. Children's Hospital at Vanderbilt, Children's Emergency Care Alliance of Tennessee (CECA), and East Tennessee State University's Quillen College of Medicine, Office of Continuing Medical Education.

TARGET AUDIENCE

This conference is designed for pediatricians, nurses, emergency physicians, family practitioners, intensivists, nurse practitioners, physician assistants, respiratory care practitioners, EMS professionals, fellows, residents, health care students, and many others involved in the care of pediatric emergencies.

ACTIVITY DIRECTOR

Mary Colleen Costello, MD
Pediatric Emergency Medicine, East Tennessee Children's Hospital
Michael W. Riker, MD
Pediatric Emergency Medicine, East Tennessee Children's Hospital

CONFERENCE OBJECTIVES

As a result of participating in this activity, the attendee should be able to:

- Understand emergency areas and new considerations in acute and pediatric care.
- Be better prepared for the complications that caring for pediatric populations present in the acute setting.

FACULTY DISCLOSURE

East Tennessee State University's Quillen College of Medicine, Office of Continuing Medical Education (OCME) holds the standard that its continuing medical education programs should be free of commercial bias and conflict of interest. It is the policy of the OCME that each presenter and planning committee member of any CME activity must disclose any financial interest/arrangement or mentor affiliation with corporate organizations whose products or services are being discussed in a presentation. All commercial support of an educational activity must also be disclosed to the learners prior to the start of the activity. Each individual with influence over content has completed a disclosure form indicating that they or members of their immediate family do or do not have a financial interest/arrangement or affiliation that could be perceived as a real or apparent conflict of interest related to the content or supporters involved with this activity. If an individual disclosed a financial interest/arrangement or affiliation that could be perceived as a real or apparent conflict of interest related to the content or supporters involved with this activity, their presentation has been peer reviewed, any potential conflicts of interest resolved, and their presentation was found to be balanced, evidence-based, and free of commercial bias.

COURSE ALTERATIONS

The Office of CME reserves the right to change topics/speakers if necessary.

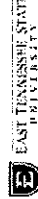
ACCREDITATION AND DESIGNATION

Office of Continuing Medical Education:

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of ETSU's Quillen College of Medicine, East Tennessee State University and the Children's Emergency Care Alliance (CECA). Children's Hospital at Eschinger, Monroe Carell Jr. Children's Hospital, East Tennessee Children's Hospital, and Le Bonheur Children's Hospital. ETSU's Quillen College of Medicine is accredited by the ACCME to provide continuing medical education for physicians. CME Credit: ETSU's Quillen College of Medicine designates this live activity for a maximum of 10.75 AMA PRA Category 1 Credits TM. Physicians should only claim credit commensurate with the extent of their participation in the activity.

College of Nursing:

East Tennessee State University College of Nursing is approved as a provider of nursing continuing professional development by the North Carolina Nurses Association, an accredited provider by the American Nurses Credentialing Center's Commission on Accreditation. Up to 6.50 continuing nursing education contact hours (CNE) have been approved for Thursday, April 21 and 4.41 CNE hours have been approved for Friday, April 22 with a maximum time for both days of 10.91 CNE hours.



EAST TENNESSEE STATE UNIVERSITY

THE 21ST ANNUAL UPDATE IN ACUTE AND EMERGENCY CARE PEDIATRICS CONFERENCE

REGISTRATION FEES

	Fees per Specialty
Physicians, PAs, and APNs	\$250
Nurses	\$165
Fellows/Residents	\$150
Allied Health*	\$150
EMS Providers	\$125
Non-Licensed Students**	\$100

*Examples include BMT, JHA, PT, OT etc. If you are unsure of your registration type, please contact 423-439-8037 for assistance.

**Student fee includes medical, nursing, APN, PA, and EMS students from any university/college with no prior certification.

CANCELLATION POLICY

Registration fees will be refunded less a \$50.00 administrative fee for cancellations received in writing a minimum of 14 days prior to the activity date. No refunds will be given when the registration fee is \$50.00 or less, or when a cancellation request is received less than 14 days prior to the start of the activity. ETSU's Quillen College of Medicine reserves the right to cancel CME activities. If an activity is cancelled, then a full refund of registration fees will be given.

To register, please visit:

<https://etsu.edu/cme/default.aspx>

HOTEL ACCOMMODATIONS

Wilderness at the Smokies: 1424 Old Knoxville Hwy. Sevierville, TN 37876
Phone number: (877) 325-9453

Wilderness is home to the Wild WaterDome, Tennessee's largest, indoor water park, which features a see-through roof that will weatherproof your vacation and give you the opportunity to tan inside all year long. Along with year-round indoor water park fun, you will find two outdoor water parks right outside your guest room door! And remember to check out the Adventure Forest dry family adventure center. Featuring a three-story ropes course, multi-level laser top, blacklight mini-golf, mega arcade, and much more!

FACULTY

Brittany Aiello, BSN, RN, CPEN
Assistant Nurse Manager – Pediatric Emergency Department
Monroe Carell Jr. Children's Hospital at Vanderbilt

Daniel Martinez Barrera, DO
Emergency Medicine Fellow
University of Tennessee Medical Center

Angie Bowen, MPS, RN, CPEN, NRP IC
Nurse/Paramedic
Radiation Emergency Assistance Center/Training Site (REAC/TS)

David Carter
Critical Care Paramedic / IC
Chattanooga Fire Department

Agnes Costello, MD
Child Psychiatrist
Cadence Physician Group Pediatric Outpatient Center

Justin Daggett, MD
Pediatric Craniofacial Surgery Specialist
East Tennessee Children's Hospital

Allen Davis, NREMT-P, CCEMT-P, FP-C
Flight Paramedic
Highlands Emergency Air Rescue and Transport

Jennifer Durham, MSN, RN, CPN, CPEN
CRPC Coordinator – CRPC Outreach Team
Monroe Carell Jr. Children's Hospital at Vanderbilt

Greg Faulkner
Captain, Family Crimes Unit
Knox County Sheriff's Office

Brooks Gaut, CCLS, CHES, CPST, CIMI
Certified Child Life Specialist
East Tennessee Children's Hospital

Andrew Gregory, MD, FAAP
Sports Medicine Specialist
Vanderbilt Children's Hospital

Debbie Harrell, MSN, RN, NE-BC
Director, Professional Relations
Shriners Hospital for Children

Lauren Havrila, DO
Pathologist
University of Tennessee Medical Center

Bennie Hearn, MAR
Paramedic Instructor/Coordinator
Jackson State Community College

Paramedic Instructor/Coordinator
Dyersburg State Community College

FACULTY (CONTINUED)

Chad Hollingsworth, BA, CCEMT-P I/C, FP-C, NRP-P, RN
Flight Paramedic
Vanderbilt Lifeflight

Chad Ingle, BS
Natural Resource Specialist
USDA Forest Service

Nina Lum, MD
Emergency Medicine Fellow
University of Tennessee Graduate School of Medicine

Matthew McCallister, MD
Pediatric Sports Medicine
East Tennessee Children's Hospital

Michael Miller, MD, PhD
Assistant Professor of Pediatrics Critical Care Medicine
Vanderbilt University Medical Center

Mary Palmer, MD
Child Abuse Pediatrics
East Tennessee Children's Hospital

Britta Roach DO
Fellow, Pediatric Emergency Medicine
Monroe Carell Jr. Children's Hospital at Vanderbilt

Zach Stutts, MS, NRP
Education Captain
Cherokee Tribal EMS

Rana Zakaria, MPH
Community Educator
Community Coalition Against Human Trafficking

THE 21ST ANNUAL UPDATE IN ACUTE & EMERGENCY CARE PEDIATRICS CONFERENCE

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